

Why, How and What of the EPA Metadata Editor 5.0

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Agenda

- Introduction
- EME 5.0
- Why develop an updated metadata editor?
- Development process and challenges
- Current State
- Important URLs



Introduction

EPA United States Environmental Protection Agency

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Environmental Dataset Gateway

Find data easily. Connecting EPA's Environmental Resources.

Advanced Search

Browse the EDG Metrics Stewards

Featured Data Products

Climate Change Environmental Justice Facility Data

Trends in April Snowpack in the Western United States

Change in Ragweed Pollen Season, 1995-2015

Reported Neuroinvasive Cases of West Nile Virus by State

Changes in Stream Water Temperatures in the Chesapeake Bay

Seven-Day Low Streamflows in the United States, 1940-

Change in Total Snowfall in the Contiguous 48 States,



EDG

Owner	# of records
OA	8
OAR	205
OCSPP	24
OECA	35
OEI	284
OCFO	8
OLEM	97
ORD	1254
OW	120

Owner	# of records
Region 1	19
Region 2	284
Region 3	12
Region 4	17
Region 5	8
Region 6	15
Region 7	41
Region 8	17
Region 9	461
Region 10	0



EDG

EPA Clip N Ship Application

Latitude: 55.350993 Longitude: -130.160107

Enter address

Basemap

EPAClip N Ship

1. Select Area

Choose a state

OR Use the draw tool

2. Select Data

Data

EPA Nationwide Data

EPA Office of Water

EPA Region 1

EPA Region 6

EPA Region 7

EPA Region 9

3. Select Vector Format

4. Select Raster Format (if needed)

5. Select Spatial Reference

The map displays a detailed topographic view of North America, focusing on the United States and Mexico. Major cities are marked with black dots and labeled. The Great Lakes are prominent in the upper center. The Appalachian Mountains run along the eastern coast. The Gulf of Mexico is visible in the lower center. A legend on the left side includes a scale bar for 1000 km and 1000 mi, a north arrow, and a scale bar. A search bar at the top right allows users to enter addresses. The interface is titled "EPA Clip N Ship Application" and includes various configuration options for data selection and download format.



EME 5.0 – Key Features

Screenshot of the EPA's Item Description metadata editor interface.

The interface includes a left sidebar with navigation links:

- Contents
- Preview
- Description
- Save
- X Exit

Category links in the sidebar include:

- Overview
- Item Description
- Topics & Keywords
- Citation
- Citation Contacts
- Contacts Manager
- Locales
- Metadata
- Details
- Contacts
- Maintenance
- Resource
- Details
- Extents
- Points of Contact
- Publisher
- Maintenance
- Constraints
- Spatial Reference
- Spatial Data Representation
- Content
- Quality
- Lineage
- Distribution
- Fields
- References
- Geoprocessing History

Main content area:

- Topics & Keywords:** A warning message: "The Tags element should be empty. Please use Topics and Keywords section." Below this is the EPA logo and the text "United States Environmental Protection Agency".
- Title:** EPA Office of Water (OW): Fish Consumption Advisories and Fish Tissue Sampling Stations NHDPlus
- Thumbnail:** A placeholder box for a thumbnail image.
- Tags:** A list of tags including: NHD, reach, rivers, streams, surface water, FISH, Fish Consumption Advisories, Fish Tissue, NLPWA, WATERS, RAD, environment, health, inlandWaters, oceans, Biology, Conservation, Contaminant, Environment, Health, Human, Marine, Recreation, Water.
- Summary (Purpose):** A detailed description of the dataset's purpose and how it relates to the NHDPlus hydrology database.
- Description (Abstract):** A summary of the dataset's content, mentioning the Fish Consumption Advisories dataset and its relationship to the NHDPlus hydrology database.
- Search Terms:** A note at the bottom stating: "A set of terms that can be used by ArcGIS to search for the resource. Terms should be provided as a comma-separated list. These terms are not derived from a thesaurus. Data type: CharacterString. From: ArcGIS metadata."



EME 5.0 – Why?

- Take advantage of aspects of ISO that improve discoverability and reduce clutter in our catalog
- Make it easier to comply with Project Open Data
- Bake in best practices to try to improve quality
- Workflow improvements in ArcGIS tools
- Developing a standalone ISO metadata editor is HARD!!



Development Process

- Agile development
 - User centric
- Began with updating EPA's Metadata Technical Specification



Development Challenges

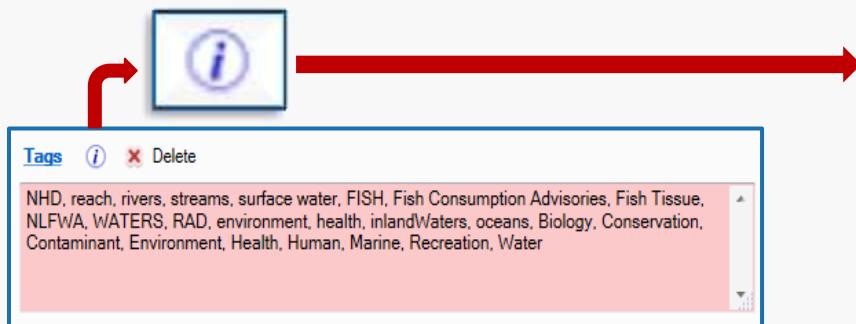
- ESRI bug - validation message doesn't link you to element
- Confusion around managing contact details
- Encouraging completion of data quality elements
- Keyword tagging
- Integrating best practices into the tool



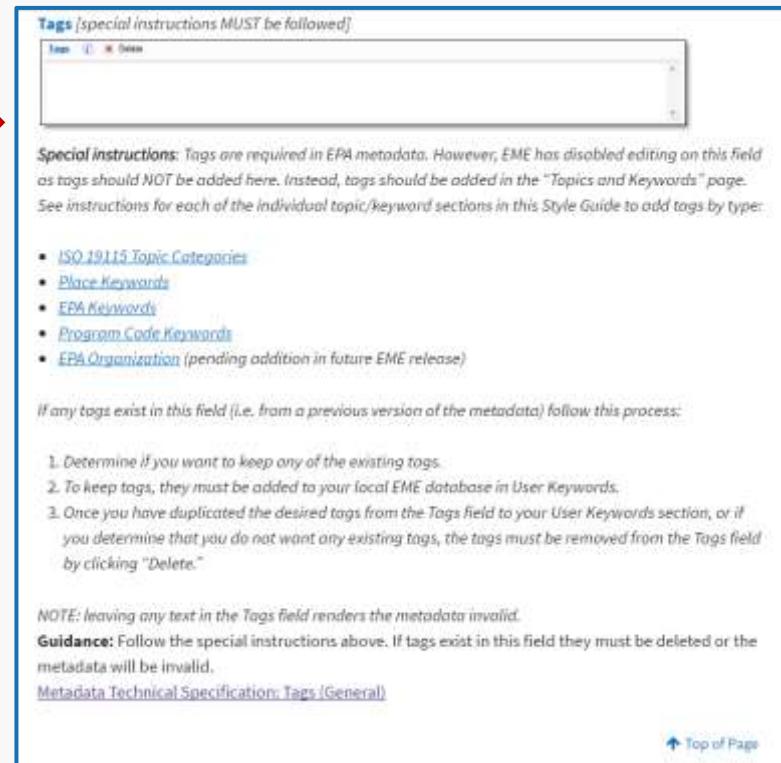
Development Challenges

EME 5.0 Help:

- The  icon next to a field name links directly to that field's detailed guidance in the [EPA Geospatial Metadata Style Guide using EME 5](#).



A screenshot of the EME 5.0 software interface showing a 'Tags' field. The field contains a list of terms: NHD, reach, rivers, streams, surface water, FISH, Fish Consumption Advisories, Fish Tissue, NLFWA, WATERS, RAD, environment, health, inlandWaters, oceans, Biology, Conservation, Contaminant, Environment, Health, Human, Marine, Recreation, Water. Above the list are buttons for 'Tags', , , and 'Delete'. A red arrow points from the info icon in the screenshot to the info icon in the top navigation bar of the slide.



Tags [special instructions MUST be followed]

Special instructions: Tags are required in EPA metadata. However, EME has disabled editing on this field as tags should NOT be added here. Instead, tags should be added in the "Topics and Keywords" page. See instructions for each of the individual topic/keyword sections in this Style Guide to add tags by type:

- [ISO 19115 Topic Categories](#)
- [Place Keywords](#)
- [EPA Keywords](#)
- [Program Code Keywords](#)
- [EPA Organization \(pending addition in future EME release\)](#)

If any tags exist in this field (i.e. from a previous version of the metadata) follow this process:

1. Determine if you want to keep any of the existing tags.
2. To keep tags, they must be added to your local EME database in User Keywords.
3. Once you have duplicated the desired tags from the Tags field to your User Keywords section, or if you determine that you do not want any existing tags, the tags must be removed from the Tags field by clicking "Delete."

NOTE: leaving any text in the Tags field renders the metadata invalid.

Guidance: Follow the special instructions above. If tags exist in this field they must be deleted or the metadata will be invalid.

[Metadata Technical Specification: Tags /General](#)





Current State

- Released the tool in early April
- Gave a training on May 9th to about 60 staff and contractors from EPA
- Additional trainings planned
- Feedback survey planned
- Backlog of enhancements and fixes
- Wondering what the future holds!
 - ESRI's roadmap for customizable metadata editors in ArcGIS Pro and ArcGIS Online



EME v5.0: *Important URLs*

EPA Technical Specification –

- <https://www.epa.gov/geospatial/epa-metadata-technical-specification>

Download EME 5.0 –

- <https://github.com/USEPA/EPA-Metadata-Editor-5/releases>

EME 5.0 Fact Sheet –

- https://edg.epa.gov/data/Public/OEI/EMEv5Files/EME5_FactSheet_20170306.pdf

EME 5.0 Installation Guide –

- <https://github.com/USEPA/EPA-Metadata-Editor-5/wiki>

EME 5.0 Metadata Style Guide -

- <https://www.epa.gov/geospatial/epa-geospatial-metadata-style-guide-using-eme-5>



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